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| APPLICATION NO.                         | FILING DATE                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--------------------------------|----------------------|---------------------|------------------|
| 10/531,655                              | 03/01/2006                     | Stefan Golz          | 004974.01084        | 4692             |
| 22907<br>BANNER & W                     | 7590 03/12/200<br>ITCOFF, LTD. | EXAMINER             |                     |                  |
| 1100 13th STREET, N.W.                  |                                |                      | LI, RUIXIANG        |                  |
| SUITE 1200<br>WASHINGTON, DC 20005-4051 |                                |                      | ART UNIT            | PAPER NUMBER     |
|   |                                |                      | 1646                |                  |
|   |                                |                      |                     |                  |
|   |                                |                      | MAIL DATE           | DELIVERY MODE    |
|   |                                |                      | 03/12/2008          | PAPER            |

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.  | Applicant(s) |  |  |  |  |  |
|--|--|--------------|--|--|--|--|--|
| Office Action Comment  | 10/531,655   | GOLZ ET AL.  |  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit     |  |  |  |  |  |
|  | RUIXIANG LI  | 1646         |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply  |  |              |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |              |  |  |  |  |  |
| Status   |  |              |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   |  |              |  |  |  |  |  |
|  | -·<br>action is non-final.   |              |  |  |  |  |  |
| <i>i</i> —   | ,—   |              |  |  |  |  |  |
| •  |  |              |  |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |              |  |  |  |  |  |
| Disposition of Claims  |  |              |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-26</u> is/are pending in the application.  |  |              |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.                         |              |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |              |  |  |  |  |  |
| · _ · · · · · · · · · · · · · · · · · ·  |  |              |  |  |  |  |  |
| 7) Claim(s) is/are rejected.   | 6) Claim(s) is/are rejected.   |              |  |  |  |  |  |
| ·  | de etiene ne errine ne ent   |              |  |  |  |  |  |
| 8) Claim(s) <u>1-26</u> are subject to restriction and/or election requirement.  |  |              |  |  |  |  |  |
| Application Papers   |  |              |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |  |              |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |              |  |  |  |  |  |
|  |  |              |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |              |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |              |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |              |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |              |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |  |              |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date   | 4)  Interview Summary<br>Paper No(s)/Mail Da<br>5)  Notice of Informal P<br>6)  Other: | te           |  |  |  |  |  |

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## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

- I. Claims 1-11, drawn to a method of screening for therapeutic agents useful in the treatment of a disease, comprising detecting binding of a test compound to a GPR14 polypeptide or determining the activity of the GPR14 polypeptide in the presence of the test compound.
- II. Claims 12-17, drawn to a method of screening for therapeutic agents useful in the treatment of a disease, comprising detecting binding of a test compound to a GPR14 polynucleotide.
- III. Claim 18, drawn to a method of diagnosing a disease in a mammal, comprising determining the amount of GPR14 polynucleotide in a sample taken from said mammal.
- IV. Claims 19-21, drawn to a pharmaceutical composition comprising therapeutic agent.
- V. Claim 22, drawn to a pharmaceutical composition comprising a GPR14 polynucleotide.

VI. Claim 23, drawn to a pharmaceutical composition comprising a GPR14 polypeptide.

- VII. Claims 24 and 26, drawn to a method fro the treatment of a disease, comprising administering to a mammal an effective amount of a regulator of GPR14.
- VIII. Claim 25, drawn to a method for the preparation of a pharmaceutical composition useful for the treatment of a disease, comprising determining whether a regulator of GPR14 ameliorates the system of a disease and combining said regulator with an acceptable pharmaceutical carrier.
- 2. The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature of Group I is considered to be a method of screening for therapeutic agents useful in the treatment of a disease, comprising detecting binding of a test compound to a GPR14 polypeptide or determining the activity of the GPR14 polypeptide in the presence of the test compound.

The special technical feature of Group II is considered to be a method of screening for therapeutic agents useful in the treatment of a disease, comprising detecting binding of a test compound to a GPR14 polynucleotide.

The special technical feature of Group III is considered to be a method of diagnosing a disease in a mammal, comprising determining the amount of GPR14 polynucleotide in a sample taken from said mammal.

The special technical feature of Group IV is considered to be a pharmaceutical

composition comprising therapeutic agent.

The special technical feature of Group V is considered to be a pharmaceutical composition comprising a GPR14 polynucleotide.

The special technical feature of Group VI is considered to be a pharmaceutical composition comprising a GPR14 polypeptide.

The special technical feature of Group VII is considered to be a method fro the treatment of a disease, comprising administering to a mammal an effective amount of a regulator of GPR14.

The special technical feature of Group VIII is considered to be a method for the preparation of a pharmaceutical composition useful for the treatment of a disease, comprising determining whether a regulator of GPR14 ameliorates the system of a disease and combining said regulator with an acceptable pharmaceutical carrier.

Accordingly, Groups I-VIII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept. Thus, unity of invention is lacking and restriction is appropriate.

## Species Election

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: diseases as listed in claims 1-3, 12, 18-26.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: each disease has distinct pathological conditions.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable

over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48 (b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48 (b) and by the fee required under 37 CFR 1.17 (l).

## Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (571) 272-0875. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol, can be reached on (571) 272-0835. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at the toll-free phone number 866-217-9197.

/Ruixiang Li/ Primary Examiner, Art Unit 1646

Ruixiang Li, Ph.D. March 3, 2008